SPECIFICATION FOR CODE 2738 ANECHOIC CHAMBER

VERY CRITICAL IS THAT THIS ENTIRE SYSTEM HAS TO BE PROCURED

FROM ONE CORPORATION ONLY

1. AZ/EL/AZ Positioner, High Precision. a)Vertical Load: 1250 lbs max, b) Height at 0° Elevation: 39-40 inches, c)Weight: 810-830 lbs. max, Rotary Encoder/Synchro Accuracy Upper AZ, EL and Lower AZ: ±0.03°, d) Direct Encoder/Inductosyn Accuracy: ±0.005°, e) Maximum Backlash Upper AZ, EL, AZ,: ±0.05°, f) EL Limit-to-Limit Travel: ±95°, g) Lower AZ Moment Bearing Capacity (static): 10,000 ft-lbs,
2. Controller – 6 Axis, 2 Axis Display, 1 Axis at a Time, Built-in CPU. Includes Operation & CommLink Manuals. a) Front panel controls and indicators, b) IEEE-488, RS232C communication, c) Dual BCD/Binary position output, d) Easy-to-use setup utility software, e) Variable velocity on the fly(Adaptive Velocity), f) TTL position increment output (TTL pulse output at computer-selected position intervals with no more than 80µsec time jitter (typ.). Position interval resolution 0.001°, Maximum increment rate: 2,000 pulses/sec), g) Closed loop velocity control, selectable for each individual axis, utilizing either synchro or tackometer feedback, h) Power: 1KW nominal, Voltage: 115/230 VAC ±10% 50/60 Hz, i) Weight: 55-65 lbs, j) Operating Temperature: 0 to 50° C operating, k) Position and Velocity Sensors: Synchro (1:1, 1:36), Tachometer (Up to +40VDC full speed)
3. Synchro Reverse Switch Feature. Internal switches to assist in the reversal of synchro direction in S/A applications.
4. Firmware XX.XX, Adaptive Velocity Feature. The unit supports the XXXXX adaptive velocity feature which maximizes measurement efficiency by allowing complete flexibility in the specification of the requested angular data densites.
5. Cable, 3 Axis Motor & Limits ABC, 50FT.
6. Cable, 3 Axis Synchro ABC, 50FT
7. Cable, Tach A-F, 50FT
8. Cable, BCD w/Trigger
9. Antennas Measurement Software: 32 Bit, Sequence Scripting, Integrated Data Presentation & Analysis, XLPro MS Excel Link, Variable Aspect Velocity Sampling, Optimum Speed Determination, Online Documentation, Plots Capture Formats to jpg, .bmp, .dib, One Button Testing, Real Time Plotting, Long File Name Support, File Concatenation, CSV to Import Utility, Multi-tasking Capability (PC dependent). Include software license, media, and documentation for use of Data Collection Software and Presentation & Analysis Software. Includes two protection keys (one data acquisition & analysis key and one analysis only key).
10. Softwar Maintenance & Support Plan (Fairfield Antenna) (One Year). Unter this agreement plan the provider will provide the following services: Provide customers with all updates, enhancements, new features and bug fixes for covered

software. Priority status technical consultations via telephone, email, fax, support from skilled operators and technicians.

11. Factory integration and testing of provider of all platforms. The customer will on provide existing RF cables.
12. System Controller: Intel Pentium 4 Class (2GHz or higher) Mini-Tower, 256 MB RAM, 40 GB HDD minimum, 3.5" FDD, CD-ROM Drive, 19" Color Monitor, MS Windows XP & Excel.
13. Software Driver: Agilent (HP) 8510X Series Vector Network Analyzer HP8510B, HP8510C (Includes single-and-multi-source control, source driver) Requires HP8510B firmware revision 5.12 or higher.
14. Software Driver for XXXX Series Positioner Controller.
15. Software Driver: Agilent (HP) 8590 Series Spectrum Analyzers.
16. Software Driver: Agilent (HP) 8508 Vector Voltmeter Receiver.
17. Software Driver: ANRITSU 4620 Series Vector Network Analyzer – Scorpion Series 4622A, 4622B, 4622C, 4623A, 4623B, 4623C.
18. Software Training for Antenna System (2 Days). This service assumes that training will be performed concurrently with the system installation with no time lapse between installation and training.
19. Installation service includes the installation and integration of new equipment.
20. CP Analysis Package. Adds the following analysis routines to Analysis Software: CP Beam Peak, CP Beam Width, CP Side Lobe, CP Axial Ratio, CP Gain.
21. Software Gating; Time Domain Option. The software emulates the internal time domain and gating capability available with the Agilent 8510 C Vector Network Analyzer and Agilent 8510A Receiver. This allows you to perform a single test, and then analyze the results with a number of gate spans, shapes, and locations. Can also 'zoom-in' on time domain features of interest with the included Chirp-Z transform. All of this can be done without tying up the range RF instrumentation for signal processing purposes. Performance characteristics – Time-Domain Transform- Fourier Transforms, (Chirp-Z implementation).